

U.S. Patent Application Serial No. 10/660,766
Amendment filed October 1, 2004
Reply to OA dated July 16, 2004

REMARKS

Claims 5-7 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicant regards as his invention. The applicant respectfully submits that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **July 16, 2004**.

Objection to the Drawings

The Examiner has indicated that Figures 8A-C, 9A-C, 11, 12A-C and 13 should be designated by a legend such as "Prior Art". Attached please find formal drawings labeling Figures 8A-C, 9A-C, 11, 12A-C and 13 as prior art.

Claim Objections

Claims 5-8 are objected to because of minor informalities. Taking the Examiner's comments into consideration, claims 5-7 have been amended, thus obviating this objection to the claims.

Claim Rejections under 35 USC §102

Claims 1-8 are rejected under 35 USC §102(b) as being anticipated by JP 2000-193844 (cited in IDS).

The present invention is an optical fiber array (100) as shown in Figure 1. This optical fiber

U.S. Patent Application Serial No. 10/660,766
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array (100) has a number of optical-fiber bare fibers (5), a plate member-A (2) and a plate member-B (1). An adjustment layer (7) is provided between the plate member-A (2) and the plate member-B (1) and formed of an adhesive (6) comprised of a mixture of a resin and an inorganic filler. The adjustment layer (7) fulfills the condition of $(d_{max} + r) < H$ in which r is the radius of the bare fibers (5), d_{max} is the thickness of plate member-B (1) and H is the distance from the center of the bare fibers (5) to the outer edge of plate member-B (1).

JP 2000-193844 relied upon by the Examiner is equivalent to

At the outset, it should be noted that JP 2000-193844 is assigned to Sumitomo Metal Mining Co. LTD with Atsushi Yamada as the inventor as in the present application. Further, JP 2000-193844 is discussed on page 8, line 9 through page 11, line 21, of the present specification and shown in figures 12A through 13 of the present application. The Examiner uses Figure 13B of JP 2000-193844 as teaching the claimed invention. JP 2000-193844, relied upon by the Examiner, is equivalent to U.S. Patent 6,368,441 which was on the list in an IDS paper presented at the time of filing the present application.

In JP 2000-193844, a constituent element designated by reference numeral 4 in Figure 13B is not a plate member but a bare fiber guide. Apparently, the Examiner has mistaken the element (4) for a plate member. Figure 13B does not represent the state in which optical-fiber bare fibers are disposed in alignment between two opposing plate members, but merely explains an intermediate step in the production of an optical fiber array (see column 8, lines 30-51 of U.S. Patent 6,368,441)

This is better seen from Figure 13C in which an adhesive layer (10) is not present in between a plate member (3) and optical-fiber bare fibers (1). Figure 13C shows the state in which the plate

U.S. Patent Application Serial No. 10/660,766
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member (3) stands separated from the bare fiber guide.

For a full understanding, the Examiner's attention is drawn to the description in column 8, lines 43-51 of U.S. Patent 6,368,441.

Therefore, claims 1 and 6 patentably distinguish over the prior art relied upon by reciting, as exemplified by claim 1,

"An optical fiber array comprising a plurality of optical-fiber bare fibers which are disposed in alignment between two opposing plate members and are optically connected to connection elements in an end-to-end facing arrangement with each other, wherein; the optical-fiber bare fibers are disposed in contact with a flat surface of one plate member A, an adjustment layer formed of an adhesive is interposed between another plate member B and the plate member A, where a flat surface of the plate member B on its side opposite to the adjustment layer serves as a disposition standard surface when the array is set in; and the adjustment layer, which fulfills conditions of $(d_{max} + r) < H$ where the desired preset distance from

- i) a central line of the optical-fiber bare fibers which is formed by connecting central points of end cross sections in the optical-fiber bare fibers disposed in alignment to
- ii) the disposition standard surface is represented by H, the maximum value of the thickness dimension in the plate member B by d_{max} , and the radius of the end cross sections of the respective optical-fiber bare fibers by r , compensates a deviation from the preset distance H that is caused by a non-uniformity in thickness dimension in the plate member B, whereby the distance from the central points of the respective optical-fiber bare fibers to the disposition standard surface is set identical or substantially identical to the preset distance H."

(Emphasis Added)

Therefore, withdrawal of the rejection of Claims 1-8 under 35 USC §102(b) as being anticipated by JP 2000-193844 is respectfully requested.

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Conclusion

In view of the aforementioned amendments and accompanying remarks, claims 5-7, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Replacement Sheets of Drawing (Figs. 8A-C, 9A-C, 11, 12A-C and 13)

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AMENDMENT TO THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 8A-C, 9A-C, 11, 12A-C and 13.

This sheet replaces the original sheet including Figs. 8A-C, 9A-C, 11, 12A-C and 13. In Figs. 8A-C, 9A-C, 11, 12A-C and 13, the legend "Prior Art" has been added.